

LISTING OF CLAIMS:

The following listing of claims replaces all previous versions and listings of claims in the present application.

Please cancel claims 3 and 4 without prejudice or disclaimer.

1. (Original) An operational amplification circuit comprising a differential amplification circuit and an outputting circuit,

said differential amplification circuit including:

a first input-stage transistor circuit to which an input signal is inputted through an inverting input terminal;

a second input-stage transistor circuit to which an input signal is inputted through a non-inverting input terminal;

third and fourth transistors connected to said first and second input-stage transistor circuits, respectively, to constitute a current mirror circuit;

a fifth transistor connected to a junction between said first input-stage transistor circuit and said third transistor;

a sixth transistor connected to a junction between said second input-stage transistor circuit and said fourth transistor; and

a current supply circuit for supplying a current to said first and second input-stage transistor circuits and further for supplying a current to said fifth and sixth transistors,

a current flowing in said sixth transistor being in proportion to the product of a current flowing in said fifth transistor, a ratio of current amplification factors of said third and four transistors and a ratio of current amplification factors of said fifth and sixth transistors,

said outputting circuit being made to output a low or high logical level on the basis of the relationship between said current to be supplied from said current supply circuit to said sixth transistor and said current flowing in said sixth transistor,

said current supply circuit being made such that, when the supply of said current to said first and second input-stage transistor circuits comes to a stop, said current to be supplied to one of said fifth and sixth transistors increases while said current to be supplied to the other does not vary.

2. (Original) The circuit according to claim 1, wherein said current supply circuit is a multi-collector transistor including a first collector connected to said first and second input-stage transistor circuits, a second collector connected to one of said fifth and sixth transistors and a third collector connected to the other of said fifth and sixth transistors so that, when the supply of a current from said first collector comes to a stop, a portion of a current flowing in its emitter flows in said second collector.

3. – 4. (Canceled)